

A4
CMT

compound containing the functional group C=N. These imine compounds are sometimes also referred to as Schiff bases. Other exemplary derivatives of C3 to C5 monosaccharides include, but are not limited to, hemiacetal, hemiketal or any oxidized derivatives. These derivatives may be formed by the reaction of the aldehyde or ketone group of a sugar with an alcohol. Still other exemplary derivatives of a C3 to C5 monosaccharide may also include, but are not limited to, dimers and oligomers of C3 to C5 monosaccharides such as xylobiose.

✓

Please replace the sole full paragraph on page 32 with the following new paragraph:

A5

Normal blonde hair was subjected to 12 heat cycles, as described in Example 2, using 0.1 wt% of the pentose amine derivative, D-Lyxosylimine in deionized water. The lyxosylimine solution protected the α -structure hair, as compared to water treatment (Table 16).

IN THE CLAIMS:

A5
PAC

Please add new claims 30-56 as follows:

30.(New) A method of protecting a keratinous fiber from extrinsic damage or repairing a keratinous fiber following extrinsic damage comprising

Abx cm

applying to said keratinous fiber a composition comprising at least one sugar chosen from C3 to C5 monosaccharides and derivatives thereof; and heating said keratinous fiber, wherein said at least one sugar is present in an amount effective to protect said keratinous fiber or repair said keratinous fiber, and further wherein said composition is applied prior to said heating or during said heating.

31.(New) The method according to claim 30, wherein said C3 to C5 monosaccharides are chosen from pentoses.

32.(New) The method according to claim 31, wherein said pentoses are chosen from aldopentoses and ketopentoses.

33.(New) The method according to claim 32, wherein said aldopentoses are chosen from xylose, arabinose, lyxose, and ribose.

34.(New) The method according to claim 32, wherein said ketopentoses are chosen from ribulose and xylulose.

35.(New) The method according to claim 30, wherein said C3 to C5 monosaccharides are chosen from tetroses.

36.(New) The method according to claim 35, wherein said tetroses are chosen from aldotetroses and ketotetroses.

37.(New) The method according to claim 36, wherein said aldotetroses are chosen from erythrose and treose.

Sub
B5

38.(New) The method according to claim 36, wherein said at least one sugar is erythrulose.

Alb
cont

39.(New) The method according to claim 30, wherein said C3 to C5 monosaccharides are chosen from trioses.

40.(New) The method according to claim 39, wherein said trioses are chosen from aldotrioses and ketotrioses.

Sub
B6

41.(New) The method according to claim 40, wherein said at least one sugar is glyceraldehyde.

42.(New) The method according to claim 40, wherein said at least one sugar is dihydroxyacetone.

43.(New) The method according to claim 30, wherein said C3 to C5 monosaccharides are chosen from furanoses and derivatives thereof.

44.(New) The method according to claim 30, wherein said derivatives of C3 to C5 monosaccharides are chosen from amine derivatives, hemiacetal derivatives, hemiketal derivatives, and oxidized derivatives.

45.(New) The method according to claim 30, wherein said derivatives of C3 to C5 monosaccharides are chosen from dimers and oligomers of said C3 to C5 monosaccharide.

Sub
07

46.(New) The method according to claim 45, wherein said at least one sugar is xylobiose.

47.(New) The method according to claim 30, wherein said composition further comprises at least one additional sugar, said at least one additional sugar being different from said C3 to C5 monosaccharides and derivatives thereof.

48.(New) The method according to claim 47, wherein said at least one additional sugar is chosen from monosaccharides, disaccharides, and polysaccharides.

49.(New) The method according to claim 48, wherein said monosaccharides are chosen from hexoses.

50.(New) The method according to claim 49, wherein said hexoses are chosen from allose, altrose, glucose, mannose, gulose, idose, galactose, talose, sorbose, psicose, fructose, and tagatose.

51.(New) The method according to claim 30, wherein said at least one sugar is present in said composition at a concentration ranging from 0.01% to 5.00% relative to the total weight of the composition.

52.(New) The method according to claim 47, wherein said at least one additional sugar is present in said composition at a concentration ranging from 0.01% to 5.00% relative to the total weight of the composition.

53.(New) The method according to claim 30, wherein said composition is in the form of a liquid, oil, paste, stick, dispersion, emulsion, lotion, gel, or cream.

54.(New) The method according to claim 30, wherein said keratinous fiber is chosen from hair, eyelashes, and eyebrows.